

REMARKS

Claims 1-32 are all the claims pending in the application.

In the interest of clarity, claims 1-14 have been amended.

Applicants have added dependent claims 17-34. Claims 17-19 depend on claim 5 and are drawn to features present in dependent claims 2-4. Claims 20-21 depend on claim 1 and 5, respectively, and are supported by Applicants' specification at page 4, lines 4-10). Claims 22-23 depend on claims 1 and 5, respectively, and support for these claims can be found in Applicants' specification, page 10, lines 5-8. Support for dependent claim 24 can be found in Applicants' specification, page 6, lines 4-5. Support for dependent claims 25 and 26 can be found in Applicants' specification, page 8, lines 34-38. Support for dependent claims 27 and 28 can be found in Applicants' specification, page 3, lines 34-37. Support for dependent claims 29-32 can be found in Applicants' specification, page 4, lines 1-19.

Claim 5 has been rejected under 35 U.S.C. 112, second paragraph, as allegedly being indefinite and also has been objected to as being dependent upon a rejected base claim.

Applicants have amended claim 5 to be written in independent form. In the interest of clarity, Applicants have also amended claim 5 to recite "that the first step is an in-line hot rolling step carried out in either the austenitic or ferritic range of the cast strip, with a reduction ratio of 20 to 70%, and then cooled down into the ferritic range if not already in the ferritic range..." Applicants did not use the Examiner's suggested language because the Examiner's language appeared to limit Applicants' claims to include a first step carried out "between" the austenitic and ferritic range. Applicants' first step may be carried out in either the austenitic range or the

~~ferritic range~~. Applicants submit that claim 5 is clear and definite. Thus, Applicants respectfully request that the Examiner withdraw the § 112 rejection and the objection of claim 5.

Claims 6 and 7 have been objected to as being dependent upon a rejected base claim.

Applicants have amended claim 5 to be written in independent form. Claims 6 and 7 are dependent on claim 5. Applicants submit that claim 5 is allowable. Thus, Applicants respectfully request that the Examiner withdraw the objection of claims 6 and 7.

Claims 1 to 4 and 8 to 14 have been rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Pronk et al, U.S. Patent 6,109, 336 ("Pronk").

Applicants have amended claim 1 to include the recitation "wherein the strip after hot rolling has a thickness of less than 3 mm."

Applicants have also amended claim 1 to include the recitation "wherein said steel contains alloying elements of Si, Cr, Ni, Mo, and Cu present in an amount less than 1%." Applicants respectfully submit this amendment clarifies the meaning of the "packaging steel" and merely adds what was believed to have already been implicitly defined therein. Accordingly, this amendment does not foreclose the application of reasonable equivalents.

Pronk discloses a manufacturing process in which a steel slab is cast and cooled, then reheated and hot rolled to obtain a strip of 10 to 15 mm thick. The strip is then reheated once more in order to be rolled again.

Applicants submit that casting followed by hot rolling, without reheating, is not disclosed in Pronk. Additionally, Applicants' process provides unexpected superiority for using the metal

for packaging, both in thickness and mechanical properties, and provides an unexpectedly superior transverse profile, which is flatter than those obtained with conventional processes.

For the above reasons, it is respectfully submitted that the subject matter of claims 1 to 4 and 8 to 14 is neither taught by nor made obvious from the disclosures of Pronk and it is requested that the rejection under 35 U.S.C. §103(a) be reconsidered and withdrawn.

Claims 1 to 4 and 8 to 14 have been rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Miyakusu et al., U.S. Patent 5,178,687 ("Miyakusu").

Miyakusu discloses a process for manufacturing steel dedicated to automotive bodies.

Applicants submit that the steel disclosed in Miyakusu could not be used as packaging steel. The maximum level of alloying elements in packaging steel, such as Si, Cr, Ni, Mo and Cu, are defined by International Standards. A main standard for packaging steel is ASTM A 623-88, which has a maximum amount of chromium of 0.1%. The technical reasons for the definitions of amounts are multiple. Chromium would harden the steel and make subsequent forming difficult. Further, when such steel is used to package corrosive foods, a part of the steel may become dissolved in the food, which could lead to severe health problems, particularly for the presence of chromium.

Additionally, Applicants respectfully submit that the process disclosed in Miyakusu differs from and does not render obvious Applicants' claimed process. The processes and steel of Miyakusu are directed to automotive steel, and thus the final thickness is higher than Applicants' claimed thickness. Further, Miyakusu does not use a cold rolling rate as high as Applicants' cold rolling rate. This is because in automotive steel, such as in Miyakusu, a small

U.S. Appln. No. 10/088,176
Amendment Under 37 C.F.R. § 1.111

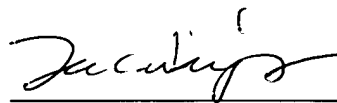
thickness is not needed. Even if they wanted to cold roll their steel at a reduction rate of at least 85%, the high amounts of chromium in the steel disclosed in Miyakusu would make cold rolling difficult.

For the above reasons, it is respectfully submitted that the subject matter of claims 1 to 4 and 8 to 14 is neither taught by nor made obvious from the disclosures of Makakusu and it is requested that the rejection under 35 U.S.C. §103(a) be reconsidered and withdrawn.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



Lee C. Wright
Registration No. 41,441

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE

23373

CUSTOMER NUMBER

Date: February 17, 2004